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REMARKS

Entry of the foregoing amendments to the application is requested on the grounds that the claims, as amended, patentably distinguish over the cited art of record or, alternatively, place the application in better condition for appeal. The claims more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. No new issues have been added which would require further consideration and/or search, nor has any new matter been added. The claims as amended are believed to avoid the rejections applied in the Final Office Action for reasons set forth more fully below.

The Office Action of January 21, 2005 has been received and carefully reviewed. It is submitted that, by this Communication, all bases of rejection and objection are traversed and overcome. Upon entry of this Communication, claims 1-8 and 10-29 remain in the application. Claim 9 has been cancelled without prejudice. Reconsideration of the claims as amended is requested.

Claims 1-4, 8, 11-15 and 18-20 stand rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 5,804,095 ('095) in view of U.S. patents 3,904,448 ('448); 6,328,819 ('819); and 3,764,407 ('407).

The Examiner asserts that '095 teaches a magnetorheological (MR) fluid formed by adding nitrided iron carbonyl particles having an average particle distribution of 3.845 microns to an MR fluid carrier. The Examiner notes, however, that the '095 patent does not teach how the particles were nitrided nor that the particles have an oxidation resistant surface. Further, the Examiner states that '448 and '819 teach the nitrided particles would have an improved oxidation resistance since the nitride coating forms an oxidation resistant surface to the nitride metal particles. Still further, the Examiner states that '407 teaches that the standard process for nitriding is to heat a metal article in a nitrogen or a nitrogen/hydrogen atmosphere at a temperature and at a time sufficient to form a nitride coating on the surface of the article. The Examiner asserts that the suggested atmosphere reads upon that claimed and that one of ordinary skill in the art would have found it obvious to use this process to form the nitrided carbonyl particles of '095.

Applicants respectfully submit that claims 1, 12 and 18 have been amended to recite that "a first portion" of the magnetic or ferromagnetic particles is exposed to the "nitrogen-rich environment" or a "nitrogen gas environment" for an interval sufficient to impart a nitrogen-rich surface on the first portion of particles, and that the first portion is then integrated or admixed with

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a second portion of particles prior to integration into the magnetorheological carrier fluid. Support for these revisions may be found in the specification as filed at page 10, paragraph 0035. As noted by the Examiner in the Official Action dated August 31, 2004, "there is no suggestion in the art that only part of the magnetic particles should be nitrided." As such, Applicants respectfully submit that amended claims 1, 12 and 18 and those depending therefrom are free of the teaching of the prior art.

Further, as none of the cited art teaches or suggests that a portion of the magnetic particles are nitrided, Applicants respectfully submit that even if one skilled in the art combined the teachings of '095, '448, '819, and '407, they would not produce the Applicants' invention as recited in amended claims 1, 12, 18 and in those claims depending therefrom. For all the reasons stated above, it is submitted that Applicants' invention as defined in amended claims 1-4, 8, 11-15 and 18-20 is not anticipated, taught or rendered obvious by the cited references, either alone or in combination, and patentably defines over the art of record.

Claims 1-9, 11-15 and 18-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,027,664 ('664) in view of U.S. patents 5,804,095 ('095); 3,904,448 ('448); 6,328,819 ('819); and 3,764,407 ('407). The Examiner states that '664 teaches a bimodal MR fluid having a first portion of particles having a size between 1-10 microns and a second portion of particles having a size 3-15 times the size of the first portion, or 3-150 microns. The Examiner notes that these sizes overlap the claimed ranges. The Examiner further notes that the '664 patent does not teach that the particles can be nitrided. Additionally, the Examiner states that '448 and '819 teach that the nitrided particles would have an improved oxidation resistance since the nitride coating forms an oxidation resistant surface on the nitrided metal particles and that '095 shows that the nitride particles can be used in MR fluids. The Examiner asserts that one skilled in the art would have found it obvious to nitride the taught iron based metal magnetic particles by the conventional method, as taught by '407, to form bimodal nitrided particles having improved oxidation resistance, and then adding these particles to an MR carrier fluid.

Reiterating the arguments above, assuming *arguendo* one skilled in the art would combine such teachings, he would not produce the method as defined by Applicants in amended claims 1, 12 and 18. Applicants have amended claims 1, 12 and 18 to recite that a portion of the magnetic particles are nitrided. None of the cited references suggest that a portion of the magnetic particles should be nitrided. Therefore, a combination of the teaching of the cited prior art would not result

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in the Applicants' invention as defined in amended independent claims 1, 12 or 18. For all the reasons stated above, it is submitted that Applicants' invention as defined in claims 1-8, 11-15 and 18-21 is not anticipated, taught or rendered obvious by the cited references, either alone or in combination, and patentably defines over the art of record.

The Examiner stated that claim 29 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Claim 29 has been so rewritten in independent form so as to make it in a condition suitable for allowance.

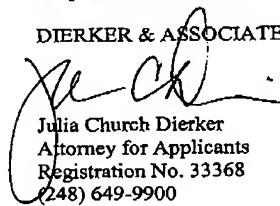
The Examiner indicated that claims 10, 16, 17 and 22-28 were allowed.

In summary, Claims 1-8 and 10-29 remain in the application. It is submitted that, through this Communication, Applicants' invention as set forth in these claims is now in a condition suitable for allowance. Should the Examiner believe otherwise, it is submitted that the claims as amended qualify for entry as placing the application in better form for appeal.

Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, the Examiner is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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Dated: March 7, 2005  
ICD/JRO/jro